

BURN TREATMENT GUIDELINES

1812

(No. 70 July 2008)

These guidelines are to be used for the medical treatment of a burn and are consistent with the *California Interagency Burn Care Management Protocol*. The initial treatment provided at the scene of the burn injury is extremely important. Proper emergency care can contribute to the burn patient's survival and, in many instances, it minimizes complications later. The treatment guidelines listed below are intended to assist the CAL FIRE care provider with step-by-step treatment procedures in the field. (Also see the [Burn Flow Chart](#)).

TREATMENT OF MINOR BURNS

1812.1

(No. 70 July 2008)

Superficial (first degree) burns involving less than 10% of body surface area with none of the following factors:

1. Burns that involve the face, hands, feet, genitalia, perineum or joint areas; or
2. Burns resulting from chemical exposure; or
3. Burns with the potential of respiratory complications

GUIDELINES FOR THE TREATMENT OF MINOR BURNS

1812.2

(No. 70 July 2008)

1. Remove the burning agent/stop the burning process..
 - Move the patient away from the heat source.
 - Follow any chemically specific guidelines (i.e. dry vs. wet procedures).
2. Assess burn injuries/assess other injuries.
 - The highest medically trained CAL FIRE care provider immediately available will assess the patient.

- Burn injuries to the face, hands, feet, genitalia, perineum or circumferential burns of extremities or joints are to be considered “Serious” and require immediate transportation to the nearest appropriately equipped medical facility.
3. Apply clean (sterile if available) moist dressing.
 - Moisten only the dressing with sterile water. Do not immerse the burn patient in water.
 4. Optional use of dry, sterile, non-adherent dressings.
 - Remove jewelry.
 - Once pain has diminished, if no immediate medical attention is required, the moist dressings may be removed. If tolerated, the burn may be covered with a dry, sterile, non-adherent dressing (e.g., Telfa dressing or band-aid).
 - Do not break blisters. Do not attempt to debride.
 - Do not apply creams or ointments.
 - Evaluate Tetanus Toxoid immunization status and advise if booster is needed. Current status would be an immunization within the past five years. If status is not current, the individual should be immunized within 24 to 48 hours.
 5. Continue to evaluate the healing process.
 - Burn injuries require continued evaluation during the first 24 to 48 hours. If the injury becomes more extensive or signs of infection appear (redness, swelling, increase in exudate), have the burn evaluated by a physician or CAL FIRE Nurse Practitioner.
 - First and second degree burns can evolve to third degree.

TREATMENT OF SERIOUS BURNS

1812.3

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1. Partial thickness burns to greater than 10% of total body surface area in patients of all ages; or
2. Burns that involve the face, hands, feet, genitalia, perineum, or joint areas; or
3. All third degree burns; or
4. Electrical injuries (including those caused by lightning); or
5. Chemical burns; or
6. Confirmed or potential inhalation injuries^{**}; or
7. Circumferential limb or chest burns

(** - For the purposes of this policy, all burns resulting from fire entrapments, direct flame contact or superheated gases will be treated as having the potential for inhalation injuries.)

If there is any doubt about the level of medical treatment, CAL FIRE will err on the side of overestimating the seriousness of an injury. The recommendation for erring on the side of *overestimating* the seriousness of the burn should take into account the circumstances of the injury (facial burns from superheated combustion products may produce airway injury and subsequent respiratory compromise). Any delay in seeking medical treatment of a serious burn may ultimately compromise the care and successful treatment.

GUIDELINES FOR THE TREATMENT OF SERIOUS BURNS 1812.4

(No. 70 July 2008)

1. Remove the burning agent/stop the burning process. Move the patient away from the heat source..
2. Activate emergency medical system and notify Incident Commander.
 - Request advanced life support (ALS).
 - Provide number of patients, percent of body surface burned (rule of 9s), classification of burns, and location of patients.

- Advise of any complications (compromised airway, traumatic injuries, shock, etc.).
3. Assess airway and other life threatening injuries.
 - Assess and ensure airway.
 - Inspect for facial burns, singed facial and nasal hair, soot in nose or mouth, pain in mouth or throat, difficulty speaking or breathing; if present, assume smoke inhalation. Administer high flow oxygen.
 - Control bleeding and assess any traumatic injuries.
 - Treat for shock.
 - Lay the patient in a supine position. Elevate affected extremities.
 4. Follow any chemically specific guidelines (i.e. dry vs. wet procedures).
 5. Treat burn wounds.
 - Apply sterile dressing and wrap loosely.
 - Do not create hypothermia by soaking the patient or applying ice or ice water.
 - Remove any jewelry on affected extremities.
 - Gently remove or cut away clothing from the area of the burn, if possible, without disturbing the burned skin.
 - Cut around clothing adhering to skin. Clothing that may be a heat source should be carefully removed to avoid causing damage to underlying tissue. Do not remove dry clothing since this may contribute to hypothermia.
 - Sterile water is the solution of preference for irrigation and cooling procedures.
 - Do not break blister or try to debride the burn in the field.
 - Do not apply any ointments or creams.

- If possible, remove contact lenses to prevent corneal injury in the case of ocular burns. (Edematous lids can cause pressure on the cornea, resulting in corneal abrasions if the contact lenses are not removed.)
 - Chemical ocular burns or exposures should be irrigated with a copious amount of saline or water. Saline is the solution of choice but irrigation should not be delayed if it is not readily available. The cleanest source of water should be used.
 - Splint fractures.
6. Prepare the patient for transport.
- Wrap the patient in a clean or sterile sheet and then a plastic sheet, blanket or sleeping bag. Extremities can be wrapped in chux and elevated.
 - On scene treatment SHOULD NOT delay transportation.
7. Continue to assess patient for hypothermia and other complications.

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[\(see Forms or Forms Samples\)](#)